

In the Claims

1. - 24. (Cancelled)

25. (Currently Amended) A folded honeycomb, comprising a large number of core strips which lie beside one another and in one plane and each comprises a corrugated or trapezoidal core having flutes with a corrugated or trapezoidal cross-section, respectively and with at least one cover layer, the cover layers of the core strips being arranged parallel to one another and transversely with respect to the one plane, and the longitudinal direction of the flutes of the core extending, for each core strip, ~~transversely with respect perpendicularly to the latter core strip~~, and the core strips being connected to one another, wherein for at least each second core strip, a cover layer of one core strip is formed in one piece with the cover layer of one of the adjacent core strips and is connected to the latter via a connection formed by a fold of 180° in the cover layer, and the connections between adjacent core strips are arranged alternately on one side and the other side of the folded honeycomb.

26. (Previously Presented) The folded honeycomb according to claim 25, wherein the ratio between the width and the height of each core strip lies in the range from 0.5 to 2.

27. (Previously Presented) The folded honeycomb according to claim 25, wherein the ratio between the weights per unit area of material making up the core and material making up the cover layer of each core strip lies in the range from 1 to 2.

28. (Previously Presented) The folded honeycomb according to claim 25, wherein the cover layer of the corrugated or trapezoidal core of at least each second corrugated strip is wholly or partly connected over its entire area to the cover layer of the corrugated or trapezoidal core of at least one adjacent core strip.

29. (Previously Presented) The folded honeycomb according to claim 25, wherein each core strip has two cover layers and a corrugated or trapezoidal core arranged between them,

and one cover layer of each core strip is formed in one piece with a cover layer of an adjacent core strip and is connected to the latter via a fold of 180°, and the other cover layer is formed in one piece with a cover layer of another adjacent core strip and is connected to the latter via a fold of 180°.

30. (Previously Presented) The folded honeycomb according to claim 25, wherein a cover layer is arranged at least on one side of a large number of core strips lying beside one another.

31. (Currently Amended) A process for the continuous production of a folded honeycomb, comprising the following steps:

- forming connected core strips in one plane, each strip comprising a corrugated or a trapezoidal core having flutes with a corrugated or trapezoidal cross-section, respectively and at least one cover layer, the cover layers of the core strips being arranged parallel to one another and transversely with respect to the one plane, and the longitudinal direction of the flutes of the core extending, for each core strip, transversely with respect perpendicularly to the latter core strip and parallel with respect to the one plane, the core strips being connected to one another and, for at least each second core strip, the cover layer of one core strip being connected to the cover layer of an adjacent core strip; and
- rotating the connected core strips through about 90° in relation to one another, as a result of which the cover layers of the core strips are folded through about 180° at lines connecting the core strips to thereby bring the longitudinal direction of the flutes of the core to extend, for each core strip, transversely with respect perpendicularly to the latter core strip and transversely with respect to the one plane.

32. (Previously Presented) The process according to claim 31, wherein the ratio between the width and the height of each core strip lies in the range from 0.5 to 2.

33. (Previously Presented) The process according to claim 31, wherein the ratio between the weights per unit area of material making up the core and material making up the cover layer of each core strip lies in the range from 1 to 2.
34. (Previously Presented) The process according to claim 31, wherein touching surfaces are firmly connected to one another, either with adhesive which is applied previously or in another way.
35. (Previously Presented) The process according to claim 31, wherein at least one cover sheet is laminated onto the folded honeycomb.
36. (Previously Presented) The process according to claim 31, wherein the step of forming the connected core strips includes cutting completely through a core web to form individual core strips.
37. (Previously Presented) The process according to claim 31, wherein the step of forming the connected core strips includes the longitudinal slitting of a core web to form connected core strips.
38. (Currently Amended) A system for producing a folded honeycomb, comprising:
 - a) a first apparatus for forming connected core strips in one plane, each strip comprising a corrugated or a trapezoidal core with flutes having a corrugated or trapezoidal cross-section, respectively and with at least one cover layer, the cover layers of the core strips being arranged parallel to one another and transversely with respect to the one plane, and the longitudinal direction of the flutes of the core extending, for each core strip, ~~transversely with respect~~ perpendicularly to the latter core strip and parallel with respect to the one plane, the core strips being connected to one another and, in at

least each second core strip a cover layer of one core strip being connected to the cover layer of one of the adjacent core strips; and

- b) a second apparatus for rotating the connected core strips through about 90° with respect to one another, as a result of which the cover layers are folded through about 180° at lines connecting the core strips to thereby bring the longitudinal direction of the flutes of the core to extend, for each core strip, ~~transversely with respect~~ perpendicularly to the latter core strip and transversely with respect to the one plane.

39. (Previously Presented) The system according to claim 38, wherein the apparatus for forming the connected core strips includes an apparatus for cutting completely through a core web to form individual core strips.

40. (Currently Amended) The apparatus system according to claim 38, wherein the apparatus for forming the connected core strips includes an apparatus for longitudinal slitting of a core web to form connected core strips.

41. (Currently Amended) The apparatus system according to claim 38, wherein the ratio between the width and the height of each core strip lies in the range from 0.5 to 2.

42. (Currently Amended) The apparatus system according to claim 38, wherein the ratio between the weights per unit area of material making up the core and material making up the cover layer of each core strip lies in the range from 1 to 2.

43. (Currently Amended) The apparatus system according to claim 40, wherein the apparatus for the longitudinal slitting of the core web has a plurality of rotating or stationary knives.

44. (Currently Amended) The apparatus system according to claim 38, wherein the rotation apparatus has a longitudinal undulation and, as a result, leads the core strips out of the one plane for some time or leads them in such a way that individual core strips or a plurality of core strips are rotated one after another.
45. (Currently Amended) The apparatus system according to claim 38, wherein an apparatus for applying adhesive to the cover layers of the core strips is located upstream or in a region of the rotation of the core strips.
46. (Currently Amended) The apparatus system according to claim 40, wherein the apparatus for cutting and for rotation in each case has adjusting devices for the variable setting of a distance of knives and guide elements in the width direction.
47. (Currently Amended) A plurality of core strips which lie one beside the other, are connected to each other and lie in one plane and which each have a corrugated or a trapezoidal core with flutes having a corrugated or trapezoidal cross-section respectively and at least one cover layer, the cover layers of the core strips being parallel to one another and the longitudinal direction of the flutes of the core, for each core strip extending transversely perpendicularly with respect to the latter core strip and parallel to the one plane, and the core strips being connected to one another, wherein for at least each second core strip, the cover layer of one core strip is formed in one piece with the cover layer of one of the adjacent core strips and can be connected to the latter by being folded through 180° to form a folded honeycomb, so that the connections between adjacent core strips are arranged alternately on one side and the other side of the folded honeycomb to thereby bring the longitudinal direction of the flutes of the core to extend, for each core strip, transversely with respect to perpendicularly to the latter core strip and transversely with respect to the one plane.

48. (Previously Presented) The plurality according to claim 47, wherein the ratio between the width and the height of each core strip lies in the range from 0.5 to 2.